MCHIP Annual Report: Dominican Republic

1. General Information	
Activity Name:	MCHIP Newborn Health
Implementing Partners (*include sub-partners*): (specify if local or international)	PATH
COTR/AOTR Name:	Damani Goldstein
Government Counterparts:	Ministry of Public Health
Geographic Focus-Province(s) and District(s):	Maternal and Child Health Centers of Excellence
Specific Objective (s) of the Activity *(from the award document)*:	**Objective 1**: Scale-up the intervention for quality improvement of prevention and treatment of newborn sepsis in the Maternal and Child Health Centers of Excellence as part of the regional strategy to improve newborn health to 2-3 additional facilities (for a total of 4-5 facilities). **Objective 2**: Strengthen the implementation of Family Centered Maternity and Kangaroo Mother Care Strategies in Centers of Excellence with trained staff; initiate expansion efforts to at least one additional center for a total of at least 3-4 facilities. **Objective 3**: Provide technical assistance to the MOH for the strengthening of the newborn health national work plan in line with the LAC Neonatal Alliance Regional Strategy and Action Plan. **Objective 4:** Implementation of the "Helping Babies Breathe" (HBB) curriculum for newborn resuscitation in all Centers of Excellence.
Expected Activity Results (*from the award M&E plan or most recent approved PMP*):	**Objective 1**: • Quality improvement activities continued for prevention and treatment of sepsis in the hospitals in DR that participated in the BASICS intervention (Musa and Los Minas) • Sepsis intervention expanded to 2-3 new facilities participating in USAID Centers of Excellence project • Baseline carried out to determine rational use of antibiotics for newborn sepsis in selected participating Centers of Excellence. Changes for improvement of management of newborn sepsis implemented in selected facilities. **Objective 2**: • Supportive supervision in the facilities implementing the strategies continued • Program evaluation carried out and results disseminated with Centers of Excellence • Scaling-up of interventions to 1-2 additional Centers initiated **Objective 3:** • Alliances with partners promoting newborn health renewed • Technical inputs provided in meetings and activities of the national committee for newborn health **Objective 4:** • Training of Master Trainers carried out • Technical assistance provided to the bilateral for implementation at scale and supervision of HBB in all ten Centers of Excellence

2. Performance Indicators *(Mandatory indicators).*	**FY10 Target M/F**	**FY10 Actual M/F**	**FY11 Target M/F**	**FY11 Actual M/F**	**FY12 Target M/F**	**FY12 Annual M/F**	**FY13 Target M/F**	**Comments** *(below or above target)*
Number of people trained in maternal/newborn health through USG-supported programs					850	849 305/544	950	
Number of special studies completed				1	1	0		Data collection finalized (3 hospitals). Analysis in process. Delayed due to difficulties with consultant.
Number of people trained in monitoring & evaluation/operational research					364 74/290	165 6/159	230	This indicator refers to health staff participating in data collection for rational use of antibiotics, neonatal sepsis, KMC, and HBB in the 3 hospitals
Proportion of all admissions to the nursery due to possible nosocomial infections					Musa: 3-5% MSL: 30% HSVP: 9%	Musa: 0% MSLM: 4.1 % HSVP: 1.0%	Baseline TBD for new hospitals. Musa, MSLM, HSVP < 5%	This indicator shows that nosocomial infections are not the main cause of admission to the unit due to newborn infections in Musa Hospital which has been sustained over time. The Los Mina Hospital identified that the highest proportion of admissions to the nursery from infections is related to maternal risk (infection in the mother) for a total of 33%. In the HSVP, the proportion of sepsis due to nosocomial infection was 1%. This proportion includes external patients, i.e. newborns coming to the neonatal unit from out of the hospital. We consider that both improvement of hand washing in the neonatal unit and the KMC program have had a positive impact in the reduction of nosocomial infections.

Number of deliveries with a skilled birth attendant (SBA) in USG-assisted programs					34,000	13,897	Projected #s from 10 CdEx	This indicators shows results for total deliveries in the 3 hospitals (information needed from Abt for rest)
Proportion of observed deliveries with essential newborn care					100%	80%	80%	This is a compound indicator corresponding to ENC at birth. It is greatly affected by the difficulty to reach 100% breastfeeding in the first hour and 100% ophthalmic prophylaxis. These two variables were below expectations and the possible explanations are the effect of staff rotation and the stock out of ophthalmic drops in the delivery room.
Proportion of observed deliveries where the elements of sterile/clean delivery were correctly applied					100% for Los Mina, Musa, and HSVP. Baseline for other Center	MSLM: 80% Musa: 91% HSV: 92.1%	Musa graduated MSLM 80% HSVP 90% Baseline TBD for La Vega, San Juan, and Mao.	This indicator in Los Mina does not reach 100% as this is a high complexity institution, with high demand, and not enough supply capacity. This is influenced by limitations of the physical infrastructure, of nursing managerial response, mid-level health staff response, new medical staff (residents) and low availability of supplies for delivery.
Number of hospitals in which KMC strategy is implemented					2	2	3-4	MSLM, HSVP, Morillo King, and possibly 1 additional TBD.
Number of hospitals in which FCM strategy is implemented					1	0	0	This strategy has not shown results. Despite being a model of care, it is hard to implement and requires a long time before showing results .As recommended in the mid-term evaluation, investment in this strategy was discontinued.
Number of newborns with low birth weight					2,000	1,806	2,200	Refers to the 3 hospitals.with KMC (Los Mina, HSVP, and Morillo King)

Proportion of LBW (<2,500 g) babies who started KMC, by birth weight category					70% in HSVP, 20% in Los Mina	90% in HSVP, 38 % in Los Mina	90% in HSVP, 60% in Los Mina, 20% in new hospital (s)	This indicator shows above expected results, indicating good demand for the KMC program in the HSVP and in MSLM. It reflects a higher than expected proportion after 8 months of implementation in MSLM.
Number of newborns who received KMC that graduate from the program, by birth weight category					35	51	35	This indicator shows the number of kangaroo babies that reached one year and are walking in the program.
Proportion of deaths in newborns who received KMC, by birth weight category					1%	HSVP 0.33% MSLM 0.96%	1%	
Proportion of newborns who received KMC lost to follow up (missed 2 consecutive visits)					8%	HSVP 4% MSLM 9%	10%	For HSVP, this indicator shows an attrition rate of 4%, lower than expected. This is due to communication with Kangaroo families via mobile phone having a positive impact in follow-up visits. MSLM does not have mobile telephone communication with families which will be recommended. For both hospitals, attrition is due to financial and geographic gaps.
Number of Master Trainers and facilitators certified in the HBB curriculum of the American Academy of Pediatrics					120	Providers 305	30 Facilitators (refresher) 300 providers	11 provider workshops were conducted and 305 skilled birth attendants were trained. HBB/ENC registry books for the delivery rooms were developed and distributed to 3 hospitals (MSLM, HSVP, MUSA) which since July 2012 are monitoring the impact of HBB in the quality of neonatal resuscitation and ENC. Data is being cleaned and reviewed.
Number of facilities with the necessary equipment and supplies for newborn					100%	0%	100%	Pending distribution of the resuscitation supplies to the 10

resuscitation with the HBB curriculum								CdEx hospitals by Abt.

3. Performance Custom Indicators *(Choose 2/3 custom indicators (outcome/ impact) that capture the results of your intervention.*	**FY10 Target M/F**	**FY10 Actual M/F**	**FY11 Target M/F**	**FY11 Actual M/F**	**FY12 Target M/F**	**FY12 Semi-Annual M/F**	**FY13 Target M/F**	**FY14 Target M/F**	**Comments** *(below or above target)*
* Proportion of all admissions to the nursery due to possible nosocomial infections					Musa 3-5%; Los Mina 30%; HSVP 9%	Musa 0% Los Mina 4.1% HSVP 1%			This indicator corresponds to the proportion of admitted cases to the newborn unit with the diagnosis of nosocomial infection. The Dr. Antonio Musa Hospital is showing that sepsis reduction is sustainable over time as a result of good practices implemented in the newborn area via hand washing and in the delivery area via clean delivery and it is showing impact on nosocomial infections. HVSP shows a reduction of sepsis as a result of the hand washing intervention in the newborn area and of the KMC program. The MSLM, a national, high complexity reference center with a higher volume of deliveries, shows a lower than expected prevalence of nosocomial infections as a result of hand washing in the neonatal area, early discharge, and less overcrowding in the unit thanks to the KMC program. It is evident that sepsis remains a risk factor, with a proportion of 43% and with a tendency to increase. This requires an improvement of ANC with an emphasis in the identification and opportune treatment of maternal infections as established by the guidelines, norms and protocols. This should cover not only the 15% of the mothers that receive ANC in the MSLN and deliver in the MSLM but is also needed to address the 85% of mothers that deliver in the MSLM but receive ANC elsewhere.
* Proportion of deaths in newborns who received KMC, by birth					1%	1%			This indicator is for MSLM and HSVP

weight category									
Number of Master Trainers and facilitators certified in the HBB curriculum of the American Academy of Pediatrics					37	37			Service providers from 4 centers have been trained by the facilitators and an additional 4 centers were trained in the last quarter of 2011, for a total of 120 health providers, and 1 center was trained in the first quarter of 2012 covering an additional 24 health providers, amounting to a grand total of 144 providers trained.

4. Brief Statement of Overall Progress (based on indicators listed in sections 2,3) to date toward Planned Results

- The activities showing the greatest advancement are the HBB trainings, due to high demand for additional training from the facilities to train all staff members that deliver babies. The impact and visibility of the HSVP KMC program has increased, transcending the hospital and the region as people from other regions and countries visit the program. The HJMCB is requesting collaboration and support to implement KMC with the La Leche League, replicating the HSVP model.
- The KMC technique is a great challenge, especially in a public hospital. HSVP has ownership and is empowered, demand from the community exists, and we can say the KMC program of the HSVP is sustainable and has the capacity to train other health institutions. In the first quarter of 2012, a KMC program was started in MSLM and the HSVP team trained the MSLM team. MSLM has 130 kangaroo babies, a team of professional staff integrated to the program, and is working on the structuring of the process. As a more complex center with higher volume of deliveries, it will require more implementation efforts and we expect an important impact in the reduction of neonatal mortality and an improvement in the quality of care of LBW and of premature babies.
- The sepsis activity is progressing, as substantiated by the sustainability in Musa hospital, and by the impact of KMC program in sepsis reduction in the HSVP. We hope to have similar results in the MSLM, although it is a more complex institution.

5. List Major Achievement/Success Stories or identify possible Success Stories since November *(beyond progress described above)*

- The KMC program in the HSVP in San Francisco de Macoris has shown an important impact in the reduction of mortality in LBW babies and premature babies, as well as in newborn mortality. The program completed its third fiscal year with 300 babies in kangaroo care and one death, corresponding to 0.33%; 51 babies graduated (left the program as they reached one year and were walking). There were no babies with retinopathy of the premature and 0 blind babies.
- The fiscal year ends with significant accomplishments in the newborn indicators of the HSVP with a 37% reduction in newborn mortality. NMR 30 x 1000 LB, with a base line of 46 x 1000 LB; this reduction was mainly due to a decrease in preterm deaths. The KMC program of the HSVP is a training center for other hospitals; it has trained the Los Minas maternity hospital and there are plans to train the Morillo King Hospital from La Vega. There is also a possibility of training one additional hospital, but the decision process is ongoing.
- The HSVP KMC program was presented in the Jornada Pediatrica of the Dominican Society of Pediatrics, where it was promoted and received the national silver medal on quality of care. The HSVP KMC program receives frequent mass media coverage (radio, local and national TV) as well as visits from other institutions.
- The KMC Dominican program exemplifies that KMC can be implemented in the public sector hospitals to give life, improve quality of care, integrate the family in the survival of their children and to make neonatology more human.

6. List Major Implementation Issues/Constraints and Recommended Actions

Implementation Issues/Constraints	Recommended Actions

The implementation of the KMC program in MSLM is an important challenge. It is a maternity with a large volume of deliveries, where the physical space is not appropriate and the necessary supplies are lacking, but the most important factor is in place- the health staff is committed to the program's implementation. Another challenge is collecting data through registries in the 3 hospitals by creating a culture of registering NB data among health staff. Currently we do have data on NB resuscitation and ENC. It was a very big challenge to collect data on sepsis treatment from the 3 hospitals, particularly in reviewing medical charts and in the time required for data entering. The consultant was extremely delayed in delivering the products. .	Follow-up and accompany the KMC program team at MSLM. Strengthen and improve implementation, with an emphasis on data registering, electronic database maintenance, and support staff, and relocate the program to an appropriate physical area that is adequately equipped with the minimum requirements to implement the program. The new area for ambulatory KMC has been identified and remodeling is to begin in collaboration between the hospital and CdEx. MCHIP decided to collect the work done until now and hire another specialist to finalize the analysis and develop the report.

7 List any major actions/events during the next 6 months

The major action/events should include those in which Front Office/Ambassador will be asked to participate, be consulted, or would have significant impact towards expected results.

A national workshop for the Centers of Excellence, MOH, and partners will be held on December 11th

11. Gender

How is your project impacting gender?

Through the KMC program, we promote the integration and participation of all family members in newborn care. Relevant integration of the couple (mothers and fathers) providing care to their babies, allows them to play a protagonist role as parents in the survival of the kangaroo newborns. This contributes towards the early establishment of the parent-child bond promoting responsible parenthood, support, company, and stability. The woman is particularly empowered by being the main caregiver of her high risk small baby.